

AMATEUR RADIO



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EDITORIAL

When that famous Greek slave and philosopher, Aesop, wrote his well-known fable on "Unity is strength," he little knew of the countless times it would be quoted, of the essays that would be written on it, and of the speeches that would use it as their theme.

We can hear our readers saying, "— but last month's editorial commenced like this. Can't these editors find something new to write about?" True! But is there anything new under the sun? This expression has stood the test of 22 centuries. Again, surely the time is just opportune, our Federal Convention has just concluded, the delegates, representing each State, have deliberated with the object in view of furthering the interests of the W.I.A. and the making of a greater unity within the ranks. Remember, "UNITY IS STRENGTH." The A.R.A. in New South Wales, which is now affiliated with the W.I.A., and the W.I.A. in all other States stands in the interests of, and for the good of, the amateurs of Australia. The P.M.G. recognises the Institute and the Institute ONLY, in all contentious matters appertaining to amateur radio. Each State forms its own domestic policy to suit the requirements and fulfil the especial needs of its own hams. Broadly speaking, this policy is to make the Institute, which, don't forget, is my Institute, your Institute, our Institute, of 100 per cent. usefulness to every member in Australia. Now this policy is, or should be, governed by the members themselves. It is advanced by the council, which is elected by the full membership of the division. If any member is not in entire agreement with any part of the organisation or policy of his division, he should, no—more than that—it is his DUTY, to see the councillors, whom he helped to put into office, and request the necessary changes to be made. If the alterations will be of benefit to the majority of the members the policy will be immediately amended accordingly.

Thus each member not only has a bulwark behind which he can shelter in times of trouble, not only has a friend and an intermediary if he needs

help, not only enjoys the companionship and gains materially by the exchange of ideas with his co-members, but also he can help to mould the present and future policy of his Institute through its essentially democratic form of government. Therefore, we appeal to every sane-thinking ham, how can there be room in Australia for any other so-called amateur organisation? They cannot receive P.M.G. recognition, nor can their aims be higher or of greater benefit than ours. There is absolutely no legitimate reason why every ham, yes—and every potential ham, in Australia should not be a member of the Wireless Institute of Australia. With a completely united front, voicing, to the powers that be, the opinions of EVERY amateur in the Commonwealth on any subject, our opportunities for advancing the ham cause and consolidating its present position will be immeasurably greater, for—"UNITY IS STRENGTH."

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Interested persons Interstate will find the address of their State W.I.A. H.Q. elsewhere in this issue.

Revamping the O-V-1 Receiver

By VK3ML.

Even in this era of single signal supers and high selectivity receivers the old faithful two tuber still stands in favour amongst a large number of hams. This may be due to one of three things. Firstly, few hams can afford to pay out hard cash for six to ten tubes; secondly, such receivers are not the easiest to get going; and thirdly, in very few cases are such ultra selective receivers necessary. We have not the QRM and melee that other countries have to cater for, and, therefore, the Australian ham can afford to sacrifice selectivity for simplicity. After all, when one examines a super-het, has it got the enormous gain that one might expect from six tubes? How many tubes are actually amplifying? Out of the six only 3.5 tubes actually contribute to the gain. The rest give to the super-het its name for selectivity. As stated above, this fine array of tubes is not absolutely necessary. To quote a specific example: During the last ARRL international contest the author actually worked 303 W stations in 42 hours working time, using a simple 224a-227 combination receiver. Situated in Malvern, where there are at least a dozen constant R max signals, this spoke well for the two tuber. Of course there is a lot in the saying that one must know one's receiver. Granted, but by juggling the combination of throttle and tuning controls it was possible to make practically every Yank QSA5, which was all that was wanted. So, before considering scrapping the old-timer give a thought as to how it could be brought into line with modern receivers.

The main essentials that are to be reckoned with are (a) Stability and (b) selectivity, combined with sensitivity.

Stability.

Wabbling, creeping and rough signals can, on many occasions, be traced to the receiver. Poor mechanical construction and poor components can be blamed for the first trouble, whilst the natural tendency of the autodyne detector to creep itself can often lead

to a false report being given. The question of rough signals is generally due to the design of the power supply and filter, and bad layout.

Of course, the most satisfactory method of using a receiver of this kind would be to employ a separate oscillator. This adds to the expense and to the number of controls necessary. However, we have been saved of much of this by the more modern type of oscillator—the electron-coupled oscillator. This is practically the answer to the ham's prayer for a stable RF oscillator. The receiver described below employs it as the detector stage and with utmost satisfaction. The trouble of creeping is almost unheard of.

Selectivity.

Not much could be said at any time regarding the selectivity of the autodyne detector. It is too much to expect from one tube; but compare such a receiver as this with one employing a stage of tuned RF. When used in this combination it is general practice to employ grid-leak type detection. In this manner the detector will work best on weak signals and not so hot on the strong ones. Consequently, what happens when three or four strong signals come wallowing-in? The broad RF stage amplifies them and expects the detector to do its stuff as it would with a weak signal. But it simply won't do that, and we get the old complaint of detector blocking and bang goes nearly all the band. Obviously the method that would be used to prevent detector blocking would be to put a gain control in the RF stage to cut the gain down. Now, where does that get us to? We are back to something that is giving us less than the straight O—V—1 would give. This question is open, and it is best left to your own imagination as to whether an RF stage is necessary. Personally, the writer wouldn't have an RF stage in the shack. It means extra controls, components, and the above.

A little titivating and minor alterations to the present detector and

one audio type receiver can transform it into something worth while. No receiver can be more stable than provided by the rigidity of the mechanical construction. It is only natural to expect to receive vibrating signals when one employs a metal panel made from thin sheet material. That used in the receiver measures 7 in. by 9 in. by 1-8 in. Therefore, closely examine all components that have been in operation for some time for they might have worn loose.

The wiring of this new receiver is quite orthodox for an electron-coupled oscillator, but provision has been made for band spreading and smooth regeneration control.

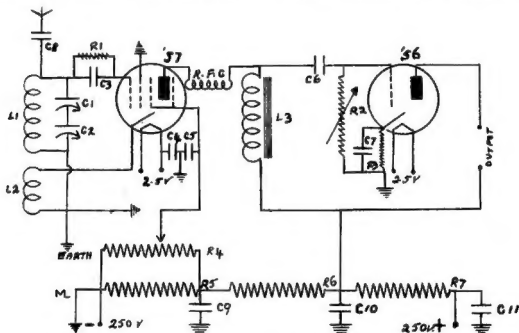
Band Spreading.

It will be noticed in the diagram that L1 is tuned to two .0001 con-

densers in series. One is used for the spread and the other for tuning. It must be observed that the top condenser is above earth, and, therefore, must be insulated from the panel. Such a combination allows for about a 70 deg. spread over most of the bands, which is quite enough. The greater the spread the more time it takes to cover the band, and one does not want to spend half an evening dial twisting! However, this method of tuning provides for a wide frequency coverage, especially when the spreading condenser is shorted out. It makes the receiver most universal.

Regeneration Control.

Of all the available systems of reaction control on an EC oscillator the one used here has given highly satisfactory results. It is smooth and



- C1—100 MMF Variable Condenser.
- C2—100 MMF Variable Condenser.
- C3—0.0001 MFD Grid Condenser.
- C4—0.01 MFD 500 Variable Condenser.
- C5—0.01 MFD 500 Variable Condenser.
- C6—0.50 MFD 500 Variable Condenser.
- C7—0.10 MFD 500 Variable Condenser.
- C8—Aerial Condenser—Two-p'ate Midget.
- C9—0.10 MFD 500 Variable Condenser.

- C10—0.10 MFD 500 Variable Condenser.
- C11—0.10 MFD 500 Variable Condenser.
- R1—1 Meg Leak.
- R2—250,000 ohm Variable Condenser.
- R3—2000 ohm 1 Watt Wire Wound Resistor.
- R4—50,000 ohm Potentiometer, Variable.
- R5—10,000 ohm 1 Watt Resistor.
- R6—10,000 ohm 1 Watt Resistor.
- R7—5000 ohm 1 Watt Resistor.
- L1—See Coil Table.
- L2—See Coil Table.
- L3—200 Henry or Higher Coupling Impedance.

silent providing a good quality potentiometer is used. However, the varying of the SG voltage reacts on the dynamic characteristics of the tube, and one must expect some slight detuning. Nevertheless, this can be neglected as the control is not used much after once being set for the particular band.

Little need be said regarding the necessary alterations to convert the present receiver, as they are so few that a careful comparison of the old and new wirings will make them quite clear. Care should, however, be exercised in the selection of the RFC in the detector plate lead. Here it is shunt feed, and only the best of chokes available should be employed.

Power Supply.

Those who have built an AC receiver have experienced the necessity

Should the hum still persist it is recommended that centre tapped resistors be inserted and by-pass condensers connected across the filaments. Wiring resistors, R5, 6, 7, under the receiver chassis is to be recommended, as it keeps the RF where it belongs and prevents it getting back into the power supply by the capacity effect of long leads to the divider. With plenty of filter and a careful layout throughout, such a receiver will be silent down to a very low wave. Finally, it is suggested that a switch be inserted in the neg HT lead for turning the receiver off when transmitting, unless one cares for hearty bangs and clix tickling the eardrums!

Coils.

All coils are wound on tube bases, either in the crude or those specially turned out for the job.

Band.	Turns, gauge and spacing.
L1.—14MC	7 turns, 20 DCC
7MC	15 turns, 20 DCC
3.5MC	30 turns, 20 DCC
L2.—14MC	4 turns, 20 DCC spaced $\frac{1}{4}$ in. from L1.
7MC	4 turns, 20 DCC spaced $\frac{1}{2}$ in. from L1.
3.5MC	5 turns, 20 DCC spaced $\frac{3}{4}$ in. from L1.

for careful placement of components so as to avoid their coming into contact with wires carrying AC. However, the use of twisted flex leads for the filament wiring is generally used to overcome trouble from that source.

Note.—The spacing given above might have to be varied to suit the aerial coupling, layout, etc. Given a coat of celluloid dissolved in amyl acetate or clear Duco, the coils will stay put for a long time.

MATRIMONIAL.

This month we have sufficient news to warrant a heading such as above.

During a QSO VK3KN was told that VK7LJ was married a week or so ago.

Next week, Bill Gronow (VK3WG), joins the ranks of the benedicts, and in April we understand Vaughan Marshall (VK3UK) is also to be married.

Both 3WG and 3UK are on the magazine staff, and we sincerely hope that their respective wives will not curtail their wonderful efforts in producing "Amateur Radio."

HARMONICS.

We regret to hear that Bruce Mann, of "High Quality Amplifier Fame" is about to undergo an operation, and trust he has a speedy recovery.

Ken. Rankin tells us that, returning with a carload of Hams from a recent country "convention," VK3CH saw a snake, and, hero-like, did some killing with a big stick. Alf. Harris tells us that one of the party (viz., VK3KR), on feeling a bump, wanted the driver to stop. He said that he wanted to get out to dispose of a herd of pink elephants.

A case of the pot calling the kettle black.

Putting the Tape on Ultra-High Frequencies

By VK2PT.

A unique characteristic of these short waves is the possibility of actually putting the tape on them, much in the same way one would measure a piece of material. There are various ways of accomplishing this. We will require two lengths of bare copper wire, 26gu, or nearest, and about 20 feet long. These are hooked up to the aerial coupling coil on the transmitter and run parallel across the room, to be insulated and securely tied at the extreme ends. It is necessary that the wires be kept as tight as possible in order to facilitate the experiment. A pea-lamp is connected per medium of a socket between two short, straight pieces of heavy copper wire, and bridged across the parallel wires close up to the transmitters. Move the lamp backwards and forwards near this point until maximum brilliancy is obtained. When this is found another piece of copper wire is bridged across the parallel wires close up to the pea-lamp on the opposite side to the transmitter; the lamp will immediately go out. Move the jumper slowly away from the lamp indicator (leaving the lamp in the same position right through the experiment) until a position is found where the pea-lamp again lights at its brightest. This point should then be marked by tying a piece of cotton around the wire or by means of a clip. The jumper is then moved away from this position farther along the wires until the lamp again reaches maximum brilliancy. The distance between these two points represents one half wave length. We now measure this distance with a rule and apply the following formula:—

$$X = D \ 2$$

39.37079

Where X = in metres

D = distance (in inches) between jumpers.

To simplify this equation, 39½ may be used for one metre in ordinary work.

The theoretical explanation of this phenomenon is simply that the lamp is lighted at the current antinodes or point of maximum current along the wires; when the jumper is applied

near the antinode it forms a short circuit and the lamp goes out. As the jumper is moved away from the antinode it reaches a current node or point of minimum current at which the lamp lights up again, there being no current here to short circuit. The distance between these antinodes will always be equal if we are to have a true sinusoidal wave form.

To complete the experiment a wavemeter should be constructed and calibrated. This may consist of an ordinary broadcast condenser with plates removed to give two stator and one rotor, coupled to a single turn coil 3 in. diam, 11 or 12 gu, and another coil 2 in. diam with a pea-lamp connected in series and placed inside the larger coil and held in position by a piece of string tied to the indicator coil, then threaded through a bead and tied to the outer coil. This makes for sharper tuning in the wavemeter. A calibrated graph can now be made and dial readings taken.

I would like to add that I have tested this method of wave-length measurement thoroughly, and have found it to be one of the most interesting experiments. I can vouch for its simplicity and accuracy.

In conclusion, it would be well to mention that only a very small wave-length range is covered by the average condenser, and the coil combination used in this class of ultra-high frequency, so don't be surprised to find that your tuning range is only a few thousand kilo-cycles.

Simplicity does not pay always; but read this true story. VK3PS had a service call from a neighbour. Appears that the receiver consisted of an ancient double grid tube with aerial connected direct to control grid. Phones from plate to positive A; space-charge grid also direct to positive A. The owner could receive only one B.C. station about four miles away. In his ardent efforts to locate trouble he had removed all the "gadgets," a real case of "forced induction," or, better still, "supercharging."—VK3PS.

Getting T9 from the TPTG

By VK3HG.

Although the Goyder Lock principle has never found great popularity here in Australia, it has been widely used in England for some considerable time, and as the circuit appeared both simple and effective the writer decided to give it a trial. The results obtained have more than justified the effort, as the note obtained is always reported as "Ringing Crystal Control."

The circuit, as used at VK3HG, consists of a straight TPTG with a self-doubling CO coupled to the grid coil. This type of crystal oscillator was used because not only is the minimum amount of gear used, but also the total current drain is less, a factor that is of considerable importance in the country. Any other arrangement could be used in the oscillator, quite as effectively, such as a straight CO and FD, or an oscillator similar to 3ML's described in December "Amateur Radio."

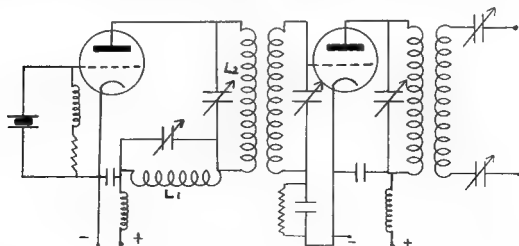
Before building a transmitter such as this it is essential to note that the use of a monitor is imperative, as it is quite impossible to tune the two circuits correctly otherwise.

It will be easiest to start up on 3.5 MC, as it will be found easier to lock the two circuits with the greater CO output obtainable on this band. Tune the CO tank L2 until the crystal oscillates (L1 is shorted out on 3.5 MC), and place the tank coil about three inches away from the grid coil of the TPTG circuit. Pick up the note in the

monitor, then switch off the CO, and tune the TPTG until its note is at zero beat with the monitor. Of course the aerial must first have been coupled and tuned in the ordinary way. Switch on the CO again and the TPTG should now be locked to it, producing a CC note. Slight readjustment to the latter circuit may be found necessary, but be sure that the coupling of the CO tank and TPTG grid coils is as loose as possible.

To tune to 7 MC or 14 MC, coil L1 is tuned until the CO oscillates, then L2 is tuned to the band desired. The CO plate voltage may have to be increased to get sufficient drive on 14 MC, but care must be taken not to overload the tube in the oscillating amplifier, as its frequency will then be liable to creep and the circuits will unlock.

For those who work exclusively on 7 MC and 14 MC a 7 MC crystal is to be recommended because of the increased output obtainable on 14 MC. The CO tube can be of any type, but an ordinary receiving tube will be found satisfactory for all medium power purposes. This circuit is not intended to replace the conventional multi-stage rig, but is intended for the man who cannot afford the components required for a three or four-stage transmitter. Practically the only cost is the crystal itself, as enough gear can usually be found in the junk box to build up the crystal oscillator.



First Country Conference

3WE.

When advised that the State president intended to visit Birchip the local "howlers" (3CH, 3LH and 3WE) considered it an f.b. idea to put into practice an idea formulated by 3WE some time ago—that rural conferences should be held under the auspices of the W.I.A.—and invited all active bands within 100 miles to foregather with them and meet our genial friend, George (having first of all solidly screwed down the junk heaps they miscall transmitters, and appointed an official searcher).

George (3TH) and Otto Holst (3BY) duly arrived on the afternoon of January 5, and we hope they had a reasonably decent time (however, they can speak for themselves). After inspecting the local transmitters (?), including the 2RM factory (miscalled Electric Supply by 3CH) the gang of five piled into 3TH's "Lizzie" (?) and went out into the Mallee, descending upon 3CE at Berriwilloch, finding that Mallee cocky busy on a harvester. Roy's "mitter" and farm plant were duly given the once over (N.B.—3TH is seriously considering going on the land—ses U). The gang were most hospitably entertained by Mrs. 3CE; so much so that they did not return to Birchip till fairly late, and after vainly endeavouring to raise the Melbourne gang on 200 MX through the 2RN and local 2RM called it a day at 3.30 a.m. Sunday.

Sunday was the main day, and just before noon hams arrived from all directions. Those who foregathered in Herb's (3LH) shack were Geo. Thompson (3TH), State president, and Otto Holst (3BY), State council (Melbourne); Paul Watson (3PY) and 2nd OP. (Warracknabeal); Murray Orr (3OR) (Lake Meran), Roy McNally (3CE), and OW (Berriwilloch); Ken Rankin (3KR) and YL (Kerang); Arthur James (3JV) (Macorma); Alf Harris, Herb James, and A. R. ("Smiler") Williams (3CH, 3LH, and 3WE), and 3CH 2nd OP (Birchip).

Proceedings were most informal. Nevertheless, when the visitors (and locals) had washed the dust from their tonsils, 3TH and 3BY were kept pretty busy answering the many inquiries shot at them. The State pre-

sident strongly impressed upon the gang the necessity of them using their best endeavours to get all active hams to join up with the W.I.A. so that the institute might speak with one voice on behalf of, and advance the aims and welfare of all VK3 hams.

Many items of interest were discussed, chief of which was phone on 200 metres, on some of the aspects of which many present were somewhat hazy as to their rights. Geo. and Otto duly cleared up several queries, and all local "howlers" now know where they are.

Another matter ventilated and one worthy of consideration at the Federal convention was that of Phone and SW on 3500 and 7000 bands. 3WE pointed out that there was a more or less tacit agreement not to use phone on 40 at night, and thought, this being so, it would be only fair to keep 80 clear for phone at night, at any rate during the winter. 3KR pointed out that very often phone had to be used on 40 to W.A.C. on Fone. The president agreed and stated the main objection to 40 phone users was the grinding out of records thereon. 3PY offered a solution—that the 3500 KC band be divided, half for phone and half for CW. This was agreed by all to be a good idea (but very hard to achieve, 3TH).

The Birchip gang provided a VY FB spread at the Alcove Cafe, after which the Melbourne visitors, after expressing their pleasure and thanks to the Birchip hams for their hospitality, set out on their 214-mile trip back to the city. The other visitors then made the rounds of the local stations, and when evening was approaching set out on their respective journeys. Before leaving, 3KR and 3OR conveyed the best thanks of the northern boys to Alf, Herb and "Smiler" for the FB time, and dropped a hint that another country "get-together" would be held at Kerang at Easter.

The move initiated by Birchip to initiate rural conferences is one that, if continued, should do incalculable good for the institute and hams generally. A majority of country amateurs have little chance of attending city

conferences or getting round to compare notes (or gear) like the townies. As our president will agree after his trip to the Mallee, they're not a bad lot of chaps really (bar looks), and all dead keen, despite the difficulties they work under.—VK3WE.

President's Addendum.

Otto and I certainly agree with the above remarks, and wish to add that we had a splendiferous time, and it was well worth the trip up. Our special thanks are due to Mrs. C.H. for her wonderful hospitality, and to all

the boys who so honoured us by coming long trips on Sunday to meet the representatives of the Victorian division of the W.I.A. The unbounded loyalty and real ham spirit of the northern hams is absolutely beyond question, and the fact that BY and myself were able to clarify many hazy ideas gave us an added pleasure. The only thing we missed was sleep, and unfortunately there didn't seem to be any time for that commodity. Many thanks to you all, and may we meet again soon and often.—Otto and George.

NOTES ON 14 MC IN SYDNEY

The usual cry that conditions are becoming worse has some support when a comparison of station logs, for November, December, 1932 and 1933, is made. Early in December last year we were able easily to contact many Europeans, with Africans and South Americans as well, but now, although HC2JM and Y16RK are fairly consistent, their strengths are comparatively weak and very few Europeans are heard at all.

The best local results have been obtained by VK2AH with his new QRO rig. He works the above stations easily, and has also landed several others like ZS1H. One bright spot appears with the advent of these South Africans, several of whom have been worked, though only one or two were faintly heard last year.

From 2XQ and 2EG, of Quirindi, comes news of good results on 14 MC, but conditions are often much better to the west of the mountains. During the quiet periods the air is enlivened by music of excellent quality from 2XU, who has recently received a card from HP1A confirming a QSO in which 2XU was given R7 for his 10-watt lone. VK2XY and 2BX divide their time between 14 and 28 MC, and 2BA may be heard slapping the bug as of yore. 2NR is trying to silence power leaks and to discover the relative merits of Zepp and Hertz aerials. VK2ER is on with 7 MC Xtals, and 2JC is a newcomer to the band. VK2LZ, one of last year's most consistent performers, is now rarely heard. Rumour has it that Con is

changing his notorious M.O.—Tripler (Modulated)—Doubler—P.A.—to a simple straight eight Xtal outfit. We are now looking forward eagerly to the event of the year—the B.E.R.U. contest, when we hope Australia will be well in the front.

28 MC IN NEW SOUTH WALES

All known activity on ten metres (28 MC) seems to be confined to four stations at present, 2BX, 2NR, 2XY and 2YC. To 2BX goes the first Interstate QSO for this season. He worked 3CW between 7.30 and 8 p.m. on December 3. 2XY had the second QSO with 4BB on the 10th, between 9 and 10 a.m., and 2YC has been heard in VK4, but doesn't seem able to hear any replies. 2NR seems to be the unlucky one, for to date he hasn't had a QSO on ten MX, though he has been heard by 4BB and 2XY, but like 2YC he may acquire a "receiver" in time. Hi!

2BX and 2YC are determined to give "somebody somewhere" a chance to hear their nice 10-metre rigs, for they have had a QSO each morning between 7 and 8 a.m. for over a month. When 2XY gets up early and joins in, 2YC becomes over-awed by the "commercial op" and QRT's.

The gear used varies from 2BX's TBO4/10 in TPTG, 2NR's PP TNT 46's, 2XY's 210 ultrandion, to 2YC's 245 TNT—the input—well!

The band shows promise this year, and it is to be hoped many newcomers will make their first appearance there before April, 1934.

STATION DESCRIPTION

VK2ER, Carlingford, N.S.W.

VK2ER is located on the hills at the west of Epping, not far from VIS. The accompanying photograph gives a general view of the station equipment. The transmitter can be seen in the right background. The large frame contains the transmitter complete with all associate power supplies, etc. On the lowest shelf next to the floor are the filament and plate supply transformers, and a regulating transformer to give a buck or boost of 40 volts in steps of 10 volts to the house supply, which in this locality is not exactly all that might be desired.

Immediately in line with the cushions on the chair (and the op likes comfort) can be seen the radial switch for selecting the correct boost or buck voltage. A reversible plug immediately below the radial switch alters the polarity of the primary of the booster to give buck or boost as desired.

On the second shelf (and behind the power panel still) are located all the low frequency rectifiers, filters, keying relay, thump filter, bleeder resistors and voltmeter series resistors.

The next shelf with the bakelite panel, and in line with the key, carries the speech amplifier, modulator, RF bias rectifier, grid leaks, etc. A number of jacks and a travelling plug allow many measurements to be made on one meter.

The next shelf (the lower one with three meters) carries the CO and FD. The upper shelf with three meters houses the PA, and the top panel provides for aerial tuning. The actual circuit employs three stages, using a TC03/5 247 as CO with either 160, 80, 60, 40 or 20-metre crystals; a UV202 or 246 as FD and an RV218 as PA.

Telefunken modulation is used with good success, the modulator tube being an RV222, which is made for the purpose of applying this type of modulation to the RV218. The bias for the RV222 is derived by rectifying RF from the doubler tank. No batteries other than the microphone battery are used in the transmitter, all other bias being derived from grid leak resistors. In the CO and FD stages two watt carbon leaks without RF chokes are connected direct from

grid to centre tap. It was found that RF chokes were unnecessary in these stages, and were only a source of trouble.

The microphone is an Ericsson type N7701, and actuates a 227 as speech amplifier. The present aerial is a 40-metre single wire matched impedance. It may be of interest to mention some tests made with aerials at this station. A suitable wire was fixed along one fence of the yard, and all the popular types of aerials made up and carefully adjusted, and the pressure induced in the test wire observed with a given transmitter input. Each aerial replaced the last in the same position relative to the test wire. It was found that the single wire matched impedance aerial gave the greatest induced pressure. Close to it came the doublet.

The standard zepp aerial gave the poorest results of all. When the particular directive effort of the doublet used as a twin zep was noticed the tests were repeated with a test wire at right angles. The results, however, were the same. These results cannot by any means be considered as conclusive and final, but they certainly exhibit the need for investigation into aerial design, etc., to obtain the maximum radiation from that 25 (?) watts input.

Referring again to the photograph, the frequency meter is seen on the left-hand end of the operating table. Next to it in the large aluminium cabinet is the 1—V—2 receiver using DC throughout. The smaller aluminium cabinet contains the monitor, and at the extreme right is a cabinet containing QSL cards, crystals, log book and miscellaneous stationery, etc.

Immediately above the QSL cabinet is the crystal-controlled frequency standard carried on a spring bracket secured to the brick wall. This standard acts as the "silent watchdog" on the frequency meter. It is operated wholly from storage batteries, and is calibrated against variations due to temperature, which in the case of this particular crystal are practically negligible. An absorption meter (standing on top of the transmitter) is particularly useful for rough work when investigating CO and FD peculiarities.

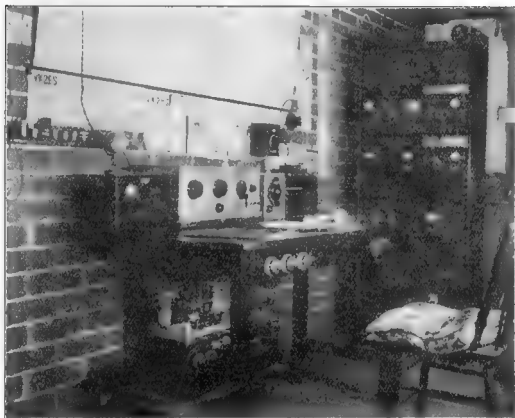
Beneath the table can be seen the storage batteries and chargers. The large, black box contains a 150-volt battery, and the charger on top of it

is actually a heavy duty eliminator made for the purpose of running the receiver direct from AC mains by putting the valve filaments in series and taking the B voltages from a series resistor, the whole to be neon stabilised. When the experiment proved a "flop" the eliminator was relegated to the job of keeping the storage B battery up to the mark. The A battery and charger are beside it on the left.

Along the table front are all control

switches and resistance control of regeneration handy to the operator. Two receiving aerials are in use, one a high single "skywire" and the other a 20-metre doublet, which cuts out QRM from VIS on the 40-metre band.

The only thing keenly desired now beside 204A's, etc., is some gadget with the "nice shiny brass handwheel" to cut out harmonics of local broadcast stations from the 30-metre band. Any suggestions, please?



AVAILABLE FREE TO W.I.A. (Vic.) MEMBERS.

Below is a list of some of the books in the library at the clubrooms, Kelvin Hall, Collins place. These are available rent free to members. Space does not permit us to list the comprehensive range of meters and testing gear also available. We hope to publish the meter library next month.

Inventory of Books in Library.

"Trouble Shooter's Manual" (Ryder).
 "Radio Principles" (Henning).
 "Radio Telegraphy and Telephony" (Duncan and Drew).
 "Radio Amateur's Hand Book," 10th Edition.
 "Principles of Radio" (Henney).

"Radio Telephony for Amateurs" (Ballentine).

"Wireless Direction Finding" (Keen).
 "Photo-Electric Cells" (Campbell and Ritchie).

"Mathematics of Radio" (Ryder).
 "Short Wave Communication" (Lander and Stoner).

"Radio" (Bureau of Standards).
 "Oscillation Valve" (Bangey).
 "Radio Receiving Tubes" (Moyer and Worsperel).

"Wireless Telegraphist's Pocket Book" (J. A. Fleming).
 "Wireless Valve Transmitters" (James).

"Experimental Radio" (Ramsay).
 "Fundamentals of Radio" (Ramsay).

MEANDERINGS OF MARJORIE

By VK3HQ.*

Tingaling, tingaling. . . . Now, who could be ringing up at this unearthly hour? Oh! the alarm. Why-ever did I make up my mind to get up to-night for DX when I could have made it to-morrow night?

Creak, creak. . . . Botheration, I'll wake the whole household. Must be particularly cautious not to wake VK3HM, as this is to be a solo night, a night of new countries, and one I shall be able to put over VK3HM and VK3HL for months.

O-o-oh, my toe! Wait till I see the 3HL Junior op in the morning for leaving her doll's pram there.

0200. Mmm CQ DX DE V8AF, with still the same old chirpy note. Worked him last year, so I'll just see what else is on the band before I call him. Really, those commercials should be kicked right out of the band! Whose band is it, anyway?

V8AF gone, of course, and it's too late to call him now, but I suppose something else will turn up soon. . . . One should always remember that a bird in the hand . . . Hullo! VQ4CRL calling CQ DX. Here's my first new country. ND, that's funny; he must have a dud receiver. I'll try again anyway. Left me cold, has he? Well, that's just too bad. I'll call CQ DX and give him a chance to redeem himself.

I suppose it's just as well there is a commercial or two to vary the monotony and to keep one awake.

Now, twenty metres is supposed to be the goods at this hour, so we'll try and prove the truth or otherwise of that statement. As the city dweller said when he looked out of a window in the country: "Just nothing, nothing and nothing!"

Well, here's a short-wave B/C station on 25 metres, probably GSD. Very nice, too; but, fond as I am of music, new countries is the object of this nocturnal visit to the shack.

Back to forty. . . . Hurrah! here's something. . . . Oh! forty, why did I

ever leave you? Only a KAI handling traffic. . . . Not interested, thanks! Just after a five-point relay contest, I ask you!

Well, there's nothing else for it but to fill in time some way, because something is sure to turn up soon. A close, hot night like this should be good for DX.

ZL1FG and ZL3BJ trying their luck. And does the latter ever leave the key alone, I wonder? They didn't last long. And if a ZL can't raise DX, who can?

I suppose it would be a good chance to write out a few QSL's I owe. No; too much like hard work, so I'll scribble a few lines about nothing at all. Thus this article is born, my first—and probably last—attempt.

I wonder how many hams have been through this before? Guess we all do some time or other in our misguided existence.

0415. A CQ at last from our old friend, J1EE. Very pleased to see him. But what does he mean by appearing at the hour that Europeans are supposed to make their debut. If he doesn't answer me I'll give up radio and start chicken-raising.

Good man! But what have I done to deserve being called "OW"? However, you are forgiven for giving me such a good report. "R8," not bad for 25 watts, hi. "Sorry, OM, but I can only give you R4, as condx hr absolutely punk."

0445. "Mni tnx fb chat es hpe cu often. Gb."

0450. PA0AZ. Of course, it would be a PK calling him, and not the genuine article.

Things are brightening, as there are a few sigs round the band at last.

BLUR-R-R-R-R! Oh, you would! VK3HL's dynamotor starts up, and I remember Allan put in a prior claim for 5 a.m. and onwards.

That's that! But what shall I say to-morrow when the usual question is asked. "How many countries did you work last night?". Methinks I'll stay in bed all day.

Sequel: 5 a.m. to 7 a.m.—3HL lands PA, UO, a couple of G's, F, OK. It's a hard, cruel world!

[VK3HM, HQ, and HL are mother, daughter and son respectively.—Ed. "A.R."]

*Marjorie Hutchings, Callawadda, Vic.

VK3 SECTION NOTES

Key Section

(Conducted by J. H. Winton,
VK3XR.)

At the last meeting of the 4th Div. Sigs. three ham members of the wireless section discussed the possibility of taking portable equipment away to the A.U.A. week-end bivouac. The hams were VK's 3KC, who has portable licence, XVK3KC, and VK's 3FX and 3HO. On Friday before the week-end 3FX built a receiver and transmitter, RX, measuring 2 in. by 4 in. by 8 in., TX measuring 6 in. by 6 in. by 6 in., and using 171A valve. On arrival at Broadmeadows camp the above-mentioned hams and two other members of the section collared a room and proceeded to get into action. A 66 ft. straight wire was strung up for aerial, and was about 14 ft. high at free end and 7 ft. high at busy end. Hi! The power supplies were two six-volt accumulators, separate ones for RX and TX, because they happened to be available, and two light duty B batteries, 100 volts on the transmitter. The input was about $\frac{1}{2}$ watt. The TX was a Hartley circuit, and RX was Schnell. The first contact was VK2BK, who gave us QSAS R5. After that we worked VK5NR QS-R6; VK2FM QS-R5; VK3WL QS-R6; VK3UJ QS-R3; VK2AT QS-R3; VK2NG QS-R6; VK3YR QS-R6; VK3XQ QS-R6; VK3HT.

VK3 Phone Notes

Again we come to the doings of the phone section, and again this section has not had a meeting since November. Consequently the meeting doings are conspicuous by their absence. As mentioned in the January issue of "Amateur Radio," it was decided to defer the phone meetings to the last Tuesday in the month. The November meeting was the last under the old scheme, and the December gathering, due to holidays, etc., was missed, and we come to our first meeting for 1934, on January 30, which will have taken place by the time this is in print. The report of this meeting will appear in March issue of "Amateur Radio."

As everyone has probably heard, the

current AOPC class is going along in great style, and I learn that a new one will commence in six to eight weeks' time. Prospective students take note—The class number will be limited to thirty members, who will, of course, receive the same privileges as the present students, i.e., free student membership and free subscription to "Amateur Radio" for twelve months.

There are still some country phone members active on the band who have failed to apply to the P.M.G.'s Dept. for an extension of their permits. In fact, several chaps will not receive allocations as a result of their failure to do this. The applications for permit extension should be at the dept. about two weeks before expiry, and applications for wave-length allocations must be made to Mr. G. F. Thompson, 3TH—the earlier the better.

As for unfinancial members of the institute—"never put off till to-morrow what you can do to-day." Except where absolutely impossible we urge all members to make a super-human effort to bring their subscriptions right up to date.

During the Christmas holidays 3BY (Mr. Otto Holst) and 3TH (Mr. George Thompson), paid a visit to Birchip. As reported in January "Amateur Radio," 3TH commenced by going to Lakes Entrance, where he proposed to listen to the boys, but apparently they cut off the power at 10.30 p.m. However, he is going to Kerang at Easter time, and probably some observations will be made from that spot.

The Birchip hams, 3CH and 3LH, apparently treated the visitors in a right royal manner. They stayed on the air long into the "not so wee" small hours of the morning, apparently talking to each other across the road. That is a fact. I believe 3CH and 3LH are situated geographically so. 3DH listened for George at these stations on the appointed Saturday night, but due to very severe QRN 3CH and 3LH were not noticed at all. They must have been somewhere back of the terrific QRN.

Another almost-all-night broadcast

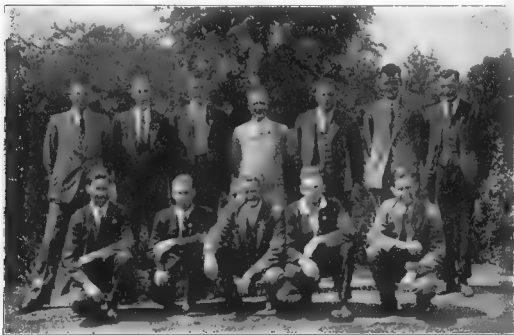
was conducted by the stations 3HF, 3RI, 3JT, 3KE, 3XL and 3FY on the night of January 20, or rather between 20th and 21st. I learn from Mr. Manning, of the allocations committee (I wasn't the mug who listened or took part this time) that 3HF commenced somewhere between 11.30 and 12 p.m., and so did some of the others. At approximately 1 a.m. I understand 3RI was hooked, and 3JT and 3KE were heard through 3RI. 3FY also started up at about 1 a.m. The most interesting event of the night or "day" was the way in which 3KE worked duplex with others. In the absence of a suitably selective receiver 3KE heard the rest on 80 MX per medium of 3XL, who had a super with which he picked

up whatsoever was required and relayed them to 3KE on 80 MX.

I believe there was a mouth-organist at 3FY who rendered some very FB efforts, but the studio manager was most unsuccessful in stopping him, so they played a record or so occasionally, the artist being blissfully ignorant of the fact that he was not on the air.

By the time these notes appear Bill R. Gronow, 3WG, will have joined the ranks of the married hams. I understand that this is his first attempt at anything on these lines. I am sure I can speak for the phone gang in wishing Bill and his OW every happiness in the future.

Ivor Morgan, 8DH.



Back Row.—3KR, 2nd OP. 3CH, 3WE, 3TH, 3BY, 3PY, 3CH.

Front Row.—3JV, 3LH, 3OR, 3CE, 2nd OP. 3PY.

COUNTRY NOTES

From the Mallee.

Well, the big event, the W.I.A. first country conference at Birchip, has come and gone, and so have George and Otto, and all the rest of the gang. Sure was a great "do," and the Birchipites entertained in slap-up style. Just showing how small the world is, our president and "Bill," of 3WE, lived next door to one another in Lilydale way back in 1913. Geo.

didn't even blush when "Bill" related how he used to sneak a car out at nites to go riding with the GL who is now his OW. Proceedings of the Birchip "do" should be reported elsewhere, so we won't belabour the subject, but anyone listening in on 200 M on the nite of 6th must have thought the Birchip gang had blown the froth off several. Especially so when Alf (3CH) complained that his 50 watter was getting hot, and 3TH told him a novel way to cool it. Rumours of another ham who travels

long distance to see a GL—Murraydale to Warracknabeal—not bad for 3CD. We're thinking of getting 3PY to put her on the air occasionally (if his YF permits) to save CD the long trip. A newcomer to the northern crew is 3ZK Swan Hill, Jim Stevens, working on 80, vy 2RP at present but hopes to do better. Got about five assistant ops and none of 'em nickel shy. Guess it costs ZK something to keep their tonsils "oiled" this weather.

Also heard on 80 phone 3AN, Redcliffs, duly answered his CQ, but don't think he can have an RX. What's wrong, Arch. We reckoned 80 MX was dead till next winter, but a few of the diehards still stick to it, and vow that next week will find them on 20 MX. However, 20 MX doesn't seem much gd. Paul (3PY) complains that he gets .3 up the stick, but "devil" an answer to his CQ. 3LH and 3WE also tried 20, but cd only hear one another. As beforementioned, 80 MX, despite heavy 2RN, appears the best bet at present. 3OR, 3KR, 3PY, 3LH, 3WE and 3YJ were in a six way QSO one night, and all getting out well, and on Sunday afternoon, 14th, 3CE, 3LH and 3WE worked 4 way with 3OR, at which time Murray had 3KR, 3CD and 3KI visiting him. By the way, discovered during this QSO that Murray is a good "fish liar"—some of the cod he described were "e-normous." Murray (3OR) heard pounding brass vy fb—mostly shifting up his new public address amplifier built, I think, a la Bruce Mann. 3NN heard QSO 3CE the other nite. I tried to horn in but the two cockies talked wheat, wool and tractors so hard they never heard me. Give the Birchip gang a call, Herb, haven't QSO'd U 4 years. Another one missing, 3GW, but going to QRT and sell out. Hope not. 3TA another silent one, but had been ill lately. Hope CR soon in the pink agn OM. 3JK has turned up again, swings a mean fist on QRP 80 M, but sure sets out fb Arthur. Posted missing 3RY and 3KL, former been 2RL, he reports waiting for a maritime call, latter may be still in trouble with the QRM from the violet ray outfit next door. 3ZL on nearly every nite, usually working 3 way with Birchip gang and 2HU. Eric (3ZL) got vy fb condenser mike working now, a little heavy on bass, but that's all to the good. 3KE duly complete with twin

GL sisters, and other spare YL's contacted tother nite (no wonder he has several 2nd ops, we're coming down to try our luck—if the YF lets us). S'pose 2nd ops are to convey all the 88's to the GL that Ern gets over the air. Hi! hi!

3CH still has his characteristic "blowfly," but he gets plenty of reports on 200 MX. Has changed from Hertz to Marconi with 5 wire fan c/poise. 3LH very worried with QRM from many sources—mostly 3CH's power station—but manages to get in a gd few QSO's. 3WE also worried by QRM, but very consistent on 80 at nites—till YF makes him quit. 3LH complains that 3OW section commander RAAFWR can't be hid in Birchip, wants to know if he's gone QRP. When last heard of 3CD was building 3-stage QRO rig, but we haven't heard it yet.

Pirates—Hrd a bloke calling CQ on 80 and signing VK3LO—three of us present so no mistake about it—has our national station gone over to CW.

3LH has been accused by Bob, of 2HU, during absences from the air, of being QRL YL's. He regretfully denies this and advises all enquirers regarding YL to apply to 3KR and his "crystal."

3KU ripping out well on 200 MX with Telefunken mod. Did u make a mistake, Ron, when u told 3LH u had 20 watts "in the aerial"? It sounded like it, anyhow.

General Phone Notes.

One of our country observers reports that a certain country 200 MX xmitter is consistently late in closing down—running sometimes 15 minutes over at each session, also that he acknowledges reports by naming person sending reports, and sometimes plays a string of half a dozen or more records without announcing his call sign.

HARMONICS.

Has anyone noticed the colour design of the cover of a certain well-known weekly radio paper.

It happens that it has been changed to the same colour combination as "A.R."

They must be feeling our "competition"!

INVENTORY OF TECHNICAL APPARATUS.

Below are some of the instruments available free on loan to members of the W.I.A. (Victorian division):—

DC Voltmeters.

Ferranti 0—7.
Weston 0—10.
Weston 0—10.
Ferranti 0—250.
Ferranti 0—250.
Weston 0—1500.
Ferranti 0—1000.

DC Milliameters.

Weston 0—10.
Ferranti 0—15.
Ferranti 0—150.
Weston 0—300.
Heyt 0—25.

DC Ammeters.

Weston 0—3.
Roller-Smith 0—5.

AC Voltmeters.

Weston 0—15.
Weston 0—15, 0—150.
Weston 0—300, 0—600.

AC Ammeters.

Weston 0—3.
Weston 0—5.

Thermo Couple Ammeters.

Weston 0—1.
Weston 0—1.
Weston 0—1.5.
Weston 0—3.
Weston 0—5.

Galvanometers.

Thermo Weston 0—100.
Thermo Weston 0—30.

Thermo Milliameters.

Weston 0—500.
Weston 0—250.
Weston 0—125.
Weston 0—4500.
Wheatsone Bridge.
Capacity Bridge General Radio.
General Radio Precision Condenser
1500 MMFD Variable.
General Beat Note Oscillator.
AF1 Standard Freq Crystal Oscillator.
2—AF3 Substandard Freq Meters.
1 TRL Tele-Picture Recorder, unassembled.

1 Set HMV Standard Freq Records.
1 Audibility General Radio 554.
1 Ferranti Multi Range Test Set.
1 Ferranti Valve Tester.
1 General Radio Output Meter 92.
1 Beat Frequency Oscillator GR.
Wavemeters, 5 metres, 2 only.
18 Meter Cases.
1 Reiss Microphone.
3 on y 50 MMF GR Variable Condensers.
3 only 100 MMF GR Variable Condensers.
2 only 0—50 DC Voltmeters.
1 only 0—150 DC Voltmeters.
1 only Tifney 0—5 Volts DC Meter.
1 only Resistance Box Inst Nr 443.
6 only GR Dials.
6 only GR Dials, small.
12 only GR Panel Switches, large.
8 only GR Panel Switches, small.
3 only GR Panel Switches, V. large.

THE ASSOCIATION OF RADIO AMATEURS (N.S.W.)

In all probability by the time that this issue of "Amateur Radio" appears in print the Federal Convention of the W.I.A. will have been held. The executive of the A.R.A., however, wish the Convention every possible success, and only regret that it has been found impracticable to send a delegate from the A.R.A. The whole of the A.R.A., however, will be present in spirit, if not in person, and will follow any reports received with interest.

It is particularly desired that members of the A.R.A. should send in technical articles for publication in "Amateur Radio," as we in N.S.W. wish to take an equally important part with other States in maintaining and improving the standard of the Journal, and this can only be made possible by the assistance of all. The secretary will be only too pleased to receive technical articles, and also more and MORE, and MORE subscriptions. SNAP INTO IT, A.R.A. (N.S.W.), and do not be left behind by the other States in the matter of enthusiasm for your own Journal.

FRANCIS M. GOYEN,
President.
ROBT. H. W. POWER,
Secretary.

ZONE 3.

During the month of December conditions on the North Coast have not been of the best for QSO, and with the Gang QRL the boys have not been very active on the air. VK2ZM has had the bad luck to blow out his 10's, and is using 45's until the winter, when he will come on the air with something out of the "BAG" as regards quality phone. Jim is also building a calibrated RX with output meter, and will be able to give the gang reliable reports and depth of modulation, etc. VK2NY is about the most active ham up North just now, and works on 40 and 80 metres. He is using PP TNT with 245's. 2GM will also have an FB phone rig going for the coming winter, and will not be on the air very much until his new rig is completed. 2AO has bought a business in South Grafton, and says he will be on the air again in the near future. 2OU, the North Coast DX king, has had some very FB QSO's, and had a rag chew with one W6 for three hours QSA5 all the time. FB Sid. 2CU has QRT. 2GK has gone to Lismore, and may be heard there from his new QRA in coming winter months.

Before long there will be a number of ham stations in the Lismore district and far North Coast. 2GL is active on 80 metres and putting out good phone to ZL using 5 watts. The Richmond River is a good QRA for RX conditions, and the ZL's come in on the speaker using 2V bat RX. 2CB, a new ham at Murwillumbah, has an FB rig using 46 xtal OS, 46 Buf and 210 in PP for the PA. and on his first 40 metre CQ's landed five W stations in the hour. Tom also has a Public Address outfit which he will use to mod the rig with, using a moving coil mike, which he says is the goods. 2XO has just had a trip up to the Tweed, and visited all the gang, and had many QSO's with the gang from the various hams' stations. 2GH, Les, was found at Ballina in a pair of shorts only, busy cleaning QRP fish. His house is right on the water, and at high tide the water laps under the floor; although A.C. is laid on to the shack, no wireless junk could be found. 2XO arrived back with a carload of junk after his trip up north, and amongst the junk were three gross of Quartz lenses, so with

plenty of xtals to QSY with now XO will be found on xtal next winter.

J. RETALLICK (2XO).

A.R.A. Zone Officer.

ZONE 6.

Conditions out in this part of the State have been very unpleasant lately. QRN very severe on all bands, even 20 metres being affected. The gang on 80 metres managed to welcome Xmas and New Year with FB multi-way QSO, including a fair number of ZL stations. One of the storms which have been prevalent blew 2QA's mast down across the telephone wires and disrupted the P.M.G.'s service for a while. The mast was about 55 ft. high, constructed of water pipe. It is now a heap of twisted wreckage. 2WH, of Forbes, has procured an alternator, and his fone has improved in consequence. Heard him on sked with 2LM, who still splits the ether with his QRO.

Judging by the remarks one hears from the Sydney fone gang, they all seem to be going in for QRO, 845's and 211's, Push-Pull. Class B are frequently mentioned. Heard 2ZN on fone recently with a fair background of music from 2CH. We understand that Bill's antenna is hanging from 2CH's masts, so were wondering if the music was caused by stray coupling, or if there was a receiver working in the shack for the purpose of keeping a check on 2CH.

One of the most consistently heard VK3's is 3ZL, who never seems to be off either 40 or 80 metres. He seems to come in equally well on both bands. 3OR also FB on 80 fone. How did the week-end tour to Birchy turn out, Murray?

This is 1934, so I take the opportunity of wishing "our" little magazine all the prosperity it richly deserves. May the New Year see it attain undreamed of proportions.

73 till next time.

JACK (VK2QA).

A.R.A. Zone Officer.

ZONE 7.

With the holiday season in full swing, activities in this zone have been somewhat spasmodic during the month. However, conditions on all bands show an improvement over last month, especially with regard to QRN. On 80 metres there is a fair amount of activity for this time of the year,

and some good fone transmissions are to be heard. QRN is, however, troublesome at times. Some very good DX is to be heard on 40 metres in the evenings and early mornings, conditions on this band being exceptionally good at times. The early morning DX seems to fade out earlier this year than is usually the case, and it is necessary to rise very early to catch it.

20 metres appears to be very patchy, conditions changing rapidly. However, the DX gets through very well on occasions.

2TA has been almost lost to ham radio of late; been going to wild parties and keeping late hours. Allan has been chasing bugs on 20 metres; but so far they have remained very elusive. 2LB has migrated to the 250 metre band and going to bed at 1 a.m. Is losing weight rapidly on this account; but we have also heard rumours about a YL. He is now using a couple of 250's in PA, with Telefunken modulation. 2WA has been fairly active on 80 metres with Telefunken fone on the new xtal rig, and having some success. Has also been chasing DX on 20 metres, and only wants South America and Africa for WAC. Jack certainly makes a bit of noise since installing his power-house. 2PN gets on the air occasionally when the YL isn't looking (or should it be YL's?). Ross is now using a couple of TCOX/10's in the PA, and raises a fair bit of DX on 20 metres. He is making preparations for the B.E.R.U. contest, and hopes to make a name for himself. Good luck, anyhow, Ross. 2EZ, the new secretary of the QRP Club in VK, seems to have his hands full. Has erected a 264 ft. Zepp, and getting swell reports with three watts to a '45. Got QSA3 R3 from W6CUH, so why go QRO. Jack is unfortunate enough to be temporarily out of a job owing to a busted boiler, but is spending his holidays with 2PN. 2FI has been back on QRP, because his engine went bung; but an Overland car engine is almost ready for the fray, and it is hoped to have things moting again soon. "Harrie," 2YI, has returned to Liverpool again, and is talking in terms of QRO. Harry has a bet with 2FI that he will work 30 countries first, and so far it's a dead heat. Hi! 2WH, of Forbes, seems to have scrapped his "B" batts, and is now using an alternator driven from 32 volt D.C. plant. Hugh puts out some

good fone with a three-stage xtal rig on 80 metres. 2WB still plays the saxophone. When are you going to brush those cobwebs off, Bill?

Well, I think that's the issue for this month; but I'd like to hear from other hams in this zone.

Cheerio till next month.

ATHOL (VK2FI).

A.R.A. Zone Officer.

ZONE 8.

2VF has shifted to a new QRA, but still in Corowa. Expects to be on the air again shortly with PP TNT outfit. 2EG is at present in Albury, and will be down this way indefinitely, but thinks he may become a VK3. His "extracting" duties will possibly take him across the border, with QRA at Tallangatta, some thirty miles from here. Another visitor is VK3KY, who is spending his vacation at Albury.

Bad QRN conditions still prevail on 40 MX, and for the past week the almost complete absence of W sigs has been very noticeable. Strange to say, sigs from VK3 have been very strong at night here. For many years only an occasional sig was heard from VK3 after sunset, and then at no time stronger than R2.

During one clear morning recently, with no QRN (strange!), J, PA, HAF and G were raised with successive calls, QRK varying from R7 to R4.

An occasional weak sig heard on 20 metres, but unable to raise 'em.

Cheerio, gang, till next month.

73's.

—NOEL (VK2OJ).

A.R.A. Zone Officer.

NORTH SHORE ZONE.

The two most outstanding events during the month of December were the Xmas 7-way 80 MX fone rag chew and the New Year 12-way VK-ZL fone party. The seven stations taking part in the Xmas party were 2KZ, 2HU, 2BP, 2NL, 2QA, 2DR. 2HU's 2nd op pulled me into the fun at 10 p.m., and we continued until 1 o'clock Xmas morning. No doubt, the rest of the chaps had been yarning since 8 p.m. It was an FB night. Unfortunately 2BP and I were unable to participate on the New Year 12-way owing to attending certain festivals at Katoomba. Hi! However, here's a graphic account of the doings by one of the faithful 12.

The raging QRN on 80 didn't dam-

pen the spirits of those ZL and VK phones who joined in the big 12-way QSO on New Year's Eve. Those who heard this QSO must have been impressed with the great friendship that exists between the Aust. and ZL hams. To sit for hours taking copy from across the Tasman with QRN trying hard to smash that great link was a feat worthy of the best. Contact was made with ZL2PD at 2110 hrs. VK time, when the final arrangements were made for this FB test. The ZL and VK stations were then called into line by their respective "key" stations, and at 2210 hrs. the first contact was made between ZL and VK. Ten stations standing by ready to do their best to cross the Tasman! And did they? Read on, OM's.

AL2PD gave the word for ZL stations to go ahead in turn. This they did, each passing over his greetings to brother hams in VK. ZL2PD then came on for an OK from VK. This was at once given, and then the VK stations went ahead in their turn. This was carried out very successfully. VK and ZL stations had two overs each, some going, because the whole QSO only took 1 hour 45 minutes. Great praise should go to the ZL's for receiving under such trying conditions. Our chaps were only using low power, the highest 20 watts and the lowest 7 watts. 2KZ for this QSO used 7 watts and loop mod, and was received QSA5, R5, in ZL. FB work, Mas OM. We wish to thank ZL2PD, who acted as key station for ZL, for the trouble to which he went to make this hook-up an outstanding success.

ZL Stations as Received in VK.

2PD QSA5, R6/7
2DV QSA4, R5
2JX QSA5, R5/6
1AZ QSA5 R5
2ML couldn't locate
1CN QSA5, R6.

VK Stations as Received in ZL.

2KZ QSA5, R5
2HU QSA, R5
2HL QSA4, R4
2UO QSA2/3, R3/4
2XH QSA2/3, R3/4.

Conditions on 20 MX have been VY, VY pnk, and several of the 20 MX die-hards have pushed up to 40.

40 MX has also been very poor. QRN has been rocking in, and DX has been only fair. 2AH reports that northern DX has been good (such as KA, J, SV, etc.), western DX poor, and local conditions fair to good. Alan

has worked G, W, VS, KA, K6, VE, PK, OM during the month. He is using a Tri-tet xtal osc, and says it's FB. 2YA. broke down completely when he saw 2AH's beautifully made rig. 2BA has his superhet RX going nicely. During November he worked ZC6CN, ZS1H (three times), CX1CG, HC1FG on 20 and VP4AA on 40 with his 4-stage xtal, using 210 final with 800 volts the plate thereon. Jack, of 2HG, is back again with good xtal sigs and a good grid mod 40 fone. We are very sorry to hear that Norm, of 2ND, is thinking of going to VK4 for good. Suppose his Comet Pro will be going with him too. Too bad. Ian, of 2XC, is back again, and has been working Yanks on 40. He is building a bug. 2UP removed the filter from his pack in order to keep sked with me, and raised a howl of anguish from the local boys. Hi! Frank, of 2ER, has been experimenting with transmitting aerials, and has found that the single wire matched impedance is the best. 2HY says conditions on 20 during December have been the worst he has experienced. However, Roy has bagged VU, G6, VS6, Y1 and SU1 during the month. 2HY is using a 4-stage xtal with 47 osc, 46 FD, and 210 PA. 2DU has been on occasionally, but has been up-country during the month. 2LZ has done a bit of 80 MX and a bit of 40 MX, but only reports SU1EC as his DX. Andy, of 2VR, is having trouble with his xmitter. 2VG has been QSO W's on 40, as usual, and putting out good 40 fone. 2UG very quiet. Also 2JV. A recent competition at a Sydney milk bar was won by 2YA. Rex managed to put down five glasses of malted milk. 2DR (runner-up) managed four glasses, and 2BK tossed in the button at three glasses. Roy, of 2HO, is active, with a plus hefty PDC xtal sig. 2NB is active too, and reports fair DX. 2AH recently visited the Newcastle boys, and says they are all getting ready for the BERU tests. Visited Jack, of 2BK, and had an FB chat. Jack is cruel to a poor 45; but hopes it will live for ever. He is using a 5-tube AC RX. I put up a vertical receiving doublet, and noticed a good lift in sig strength over the horizontal doublet. Also QRN has been reduced considerably. Owing to this, I can still work ZL fone on 80 MX with an AC2 tube RX in the middle of summer without any QRN interference.

Haven't heard from the Manly group this month. Once again I would ask hams in the North Shore Zone to please phone me at Wah. 284 or BW6311, and let me have your news.

Very sorry the notes are short this month; but 2DR is having a well-earned (?) holiday at the seaside WITHOUT a portable.

Well, so long, chaps.

VY 73.

DON 2DR.

A.R.A. Zone Officer.

VK4 (QUEENSLAND DIVISION)

The monthly meeting was held at headquarters, Heindorff House, Queen street, Brisbane, on Friday, January 12, before a good attendance of transmitting and student members.

The resignation of the assistant secretary, Mr. L. Williams, 4LS, owing to his departure from Brisbane, was accepted with regret.

Nominations were called for the vacant position, and finally Mr. C. Miller, 4US, was elected.

On Monday, January 29, several members of the portable section will be in attendance at Kingston to check the running of the 100-mile motor cycle race; fone is to be used, and transmission will take place on the 80 MX band.

A meeting of all transmitting members will be held on the second Thursday of each month, commencing on February 8, and good attendances are expected.

Kindly note that all correspondence for the institute should be addressed to the Secretary, Box 1524V, G.P.O., Brisbane.

Conditions on the 40 MX in VIB have not been of the best during the last few weeks owing to heavy QRN, which is usually the case here at this period of the year. However, a few of the boys report having worked a little DX during the early hours of the morning.

4GU worked his first DX station during the month, this being PK1WB. Dick has also landed a KA since then, and he states that both reports were satisfactory. He is looking forward to some more when condx improve. Both contacts were on 40 MX.

4JB spent his Xmas holidays at Burleigh, and while down there tried his

luck at fishing. Ock tells sum gud ones about the big fellows that got away, etc., and all the usual fish yarns. Sa, think you should join the Fisherman's Union, ob. Anyway, what's been doing in the DX line?

4LM, of Toombul, is using a Hartley with an input of 15 watts to a 46, and has been heard with a gud DC note at times. 4JF and 4ZX have been working duplex fone, and seem to be doing OK. 4ZX is using a 210 in Hartley with a power input of 18 watts. 4HR is back again in VIB for a few weeks. Tibby has been in Nambour for some time, and reports some good contacts on 40 MX with his xtal rig. 4NG has been heard quite a lot of late with his portable outfit. Roy is still at Tambourine, and seems to be getting some fb reports. Must be the location, mine tinkit. 4RS, of Prosperine, is putting out a vy nice sig, and with 20 watts input to two 245's in PP TNT comes in very solid during the daytime. 4TY, of Grace mere, is down in VIB for the Xmas es New Year vacation. Norm. is awaiting news of his transfer to another school. Says he will be glad to say goodbye to Gracemere. Hi! 4GY has been playing around with short wave super hets. Says they're the goods if you get them working rite. Sa Frank, what about 56 MC whats doing over ur way? 4UK, now of 220 South street, Toowoomba, reports condx fb for DX on 40 MX at his new ora, the following countries being worked during December as under:—AC, CT, FB, J, KA, K6, PK, SP, U, UO, VE, VP, VS, W, YM. Vic has been getting reports of R6-9 from the Yanks. Well, the new xtal rig certainly seems to be perking fb ob. 4BB, of Maryborough, is using telefunken mod and is often heard at R8-MAX here quality very gud. 4GK, "Mac," of Wynnum, says condx NSG, in fact he does not even remember things so quiet on 20 MX. Has been listening on 10 MX, but so far nothing much to report. 4WT, 'ole Bill, paid a visit to Toowoomba during the New Year holidays, and was the guest of 4RY during his short stay up there. A visit was paid to 4GR, the local B classer, on the Sunday morning, but before landing there we were joined by 4HS, a local ham who invited us into one of the local taverns to blow the froth off a couple. Bill's eyes stood out like organ stops when he saw the crowd

having an open go. At 4GR we were met by 4CG, Cliff Gold, and 4EG, Ed. Gold, who escorted us through the station (notice Cliff kept his eyes on Bill the whole time, hi), and explained all the doings there. During the afternoon a visit to 4UK, a motor drive to Picnic Point, and a couple of Oso's on 4RY's portable rig completed a very enjoyable day. Monday morning was spent motoring and several beauty spots were visited. Bill returned to VIB during the afternoon, after having spent a short, but pleasant, holiday. 4TS not heard so much lately. Ted as secretary states QRL on institute matters. 4WD, Bill Hepton, in conjunction with 4RB, Bob Browne, are to be seen sending out the Dits es Dans every Tuesday nite at headquarters for the benefit of the student members. Bob says he would gladly welcome any member who wants to pay his subs, as he always has the receipt book with him. 4RC, 4RM, 4EW, es 4OB, all appear to be doing well and getting their share of the DX that's about. 4US, Charlie Miller, "R MAX" king, spent the Xmas and New Year holidays at Candle Mts, and states that the portable TNT did its work OK. Had a bit of trouble with chirp, but next time he goes away he will carry a packet of bird seed with him. Hi! B. Batts supplied the HT to the B406. 4FK becoming interested in 56 MX, says he is working on an oscillator and receiver, and hopes to test out at an early date. 4DR has been experimenting with 2A3 tubes in push pull parallel for audio work, and states they sure have some punch. 4AW spent the Xmas and New Year holidays with 4JM, of Nambour, both of these boys spent some time on installing all-electric sound equipment, and later worked fb 56 MC fone over a distance of three miles along the river through fairly bad screening. With the aid of the motor launch used at the receiver end, some valuable dope on directional properties of receiving aerials was obtained.

Cheerio 73 RY.

VK5 (SOUTH AUST.)

Conditions here in South Australia during the last month have been very patchy on all bands, although early morning DX on 7 MC is rather good between the hours of 4 a.m. and 6 a.m.

14 MC has not been too good, and not much DX is to be heard on this band. 5MU and 5WP are the most consistent early a.m. "DX hounds," 5WP being successful in working HB9Q, F8NY, OK2RM, OK2RP, ON4JB, G6RL, UN7AK, G6RB, ZT5R, and V8AF, receiving R7 from both OK2RM and ON4JB. 5WP will be at Robe for a fortnight from 29th January, and will have transmitter using 2 watts from batteries to a 171A on the 7 MC band, and he would appreciate contacts with both local and Interstate stations. 5MU is also working quite a good deal of DX. Our friend, 5QR, is down in VIA on his annual vacation, and is seen quite often with 5RT, running around on Bob's motor-bike. They called here one day and had a chew on their way down for a swim. 5QR has been stationed at Pyap for the last 18 months, and while there he has been using a very compact and efficient portable xmitter - receiver measuring only 12 x 9 x 4 inches, using 120 v. on an A415 in TNT circuit. Has QSO'd with W, ZL, and PK, and the average VK report has been R6. He is building MOPA now with Heising modulation, with an input of 6 watts. Has been running sked with 5RT on 3.5 MC every Thursday night. He says Pyap is excellent location for transmission and reception.

5RT.—Bob is our prominent experimenter with electron coupled oscillators. His new rig is built into a very nice looking frame and panel job, and comprises a 58 as EC oscillator, feeding into a pair of E406's as PP buffer stage, which are modulated with a system of grid modulation using an A415, this stage feeding a pair of QC05/15's PPPA. The 7 MC tank for PA has 40 feet of wire in its make-up, and has no capacity across it whatever. Bob must be a staunch supporter of low C amplifier tanks. Receiver being used is a single signal super 5MU. Malcolm is working quite a lot of DX. His rig is a 4 stage CC with E406 in final. Uses a single sig super, and gave VE5FG R9 a short time ago, also has a brand new 866, but doesn't use it! Has now worked 35 countries in five continents.

5MB.—Merv now has job at local broadcasting station. Was married month ago, and hasn't shifted gear to new ORA yet. 5BY heard on 7 MC occasionally with VY FB T9 signal, and the old vibroplex doing her usual

swell job. Surprised everybody by attending a WIA meeting t'other night! 5RW, the Westbourne Park Radio Club, is on 7 MC with nice T9 signal, working plenty of DX, but are having trouble with receiver and power QRM. 5DQ joined the ranks of the 200 metre gang, and was heard often working duplex with 5ZC. Modulation percentage and quality from both was really good. 5MY, Harry is still working almost everything he hears. He uses 3 stage CC with 47-47-E406, and has 1.2 amps in a wave Zepp. During the last six weeks Harry has had 42 QSO's, only five of them being VK's. The rest were located in 16 countries in five continents. 5YK, "Rich" has been doing quite a fair bit of intricate experimenting on the 14 MC band, with a PPTPTG and 210's. Say, boy, have you found the centre of the band yet? Hi! Using Single Sig Super, can hear plenty, but QSO few! 5UK, Tom has the best SE signal in South Australia, and, combined with his excellent fast sending, it is a pleasure to work with him. The only fault Tom has is that he is not a member of the W.I.A.! QRA is 10 Thomas street, Unley. 5MD still using 4 stage CC rig with F443 final and 3 tube TRF receiver. Very QRL with duties of Federal Secretary. 5GO, George lives at the Parafield aerodrome, 14 miles from Adelaide, and hears all sorts of DX, including plenty of South Americans, but owing to the extremely heavy screening of his aerial by trees he can't QSO DX stations. 5LD, Launse has worked eight new countries on 20 metres this year, including SU, YH, YI, VU, PK, J, and HP. Uses Hartley with 245, and 82 rectifier with 18-20 watts. Says that DX very good on 40 m. between 0100 and 0400, especially for QSO's with Africa using 235 and 227 receiver. 5DX, 5WB, 5RM, 5ZC, 5KH, 5MD, 5RP, 5DR, 5WS and 5ML do their best on 200 metres every Sunday a.m. I think 5DX has the best modulated signal, and his transmission is a pleasure to listen to. Don uses a 3 stage CC rig with '47 OSC 47 buffer and TBO4/10 Class C. amp. 5MD went on a fishing trip in 5ML's speed boat, and got quite a decent haul of (?) fish. Ask 5MD how he felt when we were returning to the harbour with rather a heavy following sea. Hi!

On January 21st the S.A. Division of the W.I.A. are holding a cricket and

tennis match at Hawthorndene, which promises to be a great event. Hope to publish individual scores in the next issue of "Amateur Radio."

5ML.

VK6 (WEST AUSTRALIA)

The January general meeting was held on Thursday, 18th inst., but owing to the hot weather only the old stickers arrived.

The meeting proved to be rather a lively one despite the adverse conditions, business for the Federal convention being an all nite task, and some job, too. Those present included the president, 6AG; secretary, 6JK; assistant secretary, 6LK; treasurer, 6CX; editor, 6KR; PB officer, 6RL; vice-presidents, 6GM, 6MN, 6GP, 6SA, 6PK, 6FT, and 6BN, who paid us a surprise visit. He has been on the sick list for sum time, but now we look forward to a comeback from Bert.

Conditions on 7MC have shown a slight increase for the better lately, and VK6 hams should all be in full swing by now.

6JK was unfortunate in receiving a nasty trick at his expense. We were sitting around his shack absorbing lime drinks, etc., when Mrs. 6JK came in and started to laugh, and amidst the laughter words came out to the effect that his mast was down. On investigating we found a mixture of wire, wood, mulberries, telephone lines and sum. It was later decided that lightning had played the trick. But that didn't stop Jack; he had another one up next day.

Exams seem to be the chief order of the day hr, and until March is over things are bound to be ver quiet.

Among those heard lately on 7MC were 6LK, 6CX, 6KR, 6BO, 6RA fone, 6CP fone, 6MN, 6FO, 6LR, 6GF, 6AM.

6KR has been qrl wid Fed Convention in Adelaide, and as nothing has come to hand at time of writing, full details will be given at first VK6 meeting.

While 6KR is in the east 6CX will be wrking his (6KR's) xmitter so that he may find out what other hams have to put up with.

The following has been received from 6LJ, manager of QSL Bureau:—
Sa, young squirts, attention!

Last October, 1933, the PK gang held a DX contest and qso'ed a number of

VK hams; also the VK hams failed to send QSL's when they promised to do so. Now, if this gets around, the name of VK will be trodden under foot. So if your call sign appears below please send a card either direct or thru me to PK. The particular station which is most concerned is PK3BQ:—

VK2—2OZ, 2YL.
VK3—3ET, 3UH, 3ZM, 3PQ.
VK4—4MY.
VK5—5ML, 5FL, 5RH, 5JH, 5ZY,
5BC, 5KQ.

VK7-TASMANIAN DIVISION

The large increase in members of this division during the past months is undoubtedly the reason why some further activities should be provided within the Institute to absorb the interest of these new recruits, and also to encourage new members to join.

With this idea in view, a committee was formed to investigate the problem, and at the January meeting a list of items was brought forward and a general discussion followed.

It was decided to form groups so that every member, whatever his status, would find something to interest him. A short wave group, for instance, is to be formed, so that new members will be able to break-in on short waves with the help and advice of those who are further advanced. At the present time, a new member's interest is often confined only to the monthly meetings, with the result that his attendance becomes less and less, and is eventually listed as one of the "has-been" members. It was decided also to hold the field days much oftener—about every two months or so if possible.

Coinciding with these intended increased activities comes the decision that the Institute shall at last change its location. Two rooms over Medhurst and Sons', in Collins, have been decided on, and are a very great improvement upon the present ones. The change-over is to be made almost immediately.

Surely these activities will mean a turning point in the division's history, as yet another change is to be made, this time in secretaryship. Since the resignation of Mr. Harrison (7CH) in July last, Mr. Buring (7RB) has held this hard-worked but seldom-praised position in a very commendable man-

ner, despite the fact that his time is very limited. One of our new "live-wire" members (Mr. Moorehouse) has agreed to take the position, so that, together with the other changes, there seems no reason why this division should not prosper and become one of the leading organs of the W.I.A.

Jottings.

Condx on the various bands have been very erratic hr. On 80 MX Interstate sigs are at times very weak, and at others they come in with heaps of punch. 40 MX up till about Xmas time was good for DX, but since then has been very poor indeed; only occasionally has there been anything like a normal period of operation. 20 MX yields some DX if it is possible to listen there all the time, but it isn't worth wasting time and juice on at present.

7KV has worked several Asiatics, also some G's and an OZ. FB OM. The rig is a MOPA, with E406's in PP in the PA. 7JB active, as usual, es gets his share of DX. 7CH is active with Xtal rig es bug! 7CW pounds brass occasionally now on 40—Xtal, of course, with a 50 watt in the final. 7WR has for sum time now been on the "B" class station, 7UV, on the North-West Coast, so I guess the BCL's miss the usual Sunday morning programme. 7PK has now given up teaching, es is also at 7OV. 7JH is a new ham located in New Town, es puts out a very nice sig, using 171A's in PP TNT. 7PA is another new sig, es has worked sum VS6's, es I think a K6 also, using quite a number of watts on sum poor ole 245's. 7GE is on at times with the usual DC sig, and works Yanks when condx permit. 7MM is not heard much owing to being QRL wid work, but plans a new xmitter, es then will be heard much more. 7CP es 7LZ are also active—mostly on 80 MX.

There are now three ex-VK3 hams in Deloraine—3OJ, 3GP and 3JO. Most work is done on 80 MX, although 40 MX is sometimes given a try.

Well, OM's, guess QRU nw, so will CU agn.

73 FM.

VK7NC.

VK3NQ qso VK3PG, 90 miles distant, using half volt on the plate. "Not bad," says 3NQ, "but old OA2CM qso ZL on 160 metres, back in the early days of radio, used only quarter volt on the plate."

NORTH SUBURBAN RADIO CLUB (VK3FY)

On Monday, January 22, the half-yearly meeting of the above club was held at the clubrooms, 354 Rathdown street, North Carlton.

The secretary and treasurer, Mr. W. Wonder, presented the statement for the half-year, which showed the club to be in a very good financial position.

The election of officers then took place, and the following were elected:—President, Mr. W. Murden, 3TY; vice-president, Mr. A. Stow, 3AS; hon. secretary and treasurer, Mr. F. Maher, 3FZ; assistant hon. secretary, Mr. J. O'Brien; committeemen, Messrs. Dowling, Wonder and Smith; publicity officer, Mr. W. Wonder; delegate to W.I.A. (fone section), Mr. W. Wonder; delegate to W.I.A. (key section), Mr. R. Dowling; auditors, Mr. T. Evans and Mr. H. Goldberg; technical committee, Messrs. Dowling, Evans, Stow and Murden.

Mr. W. Murden recently passed his AOPC, and his QRA is Mansfield street, Thornbury.

The meetings for the month of February will be held on the 5th and 19th inst. at the clubrooms at 8 p.m., and all interested are invited to attend.

VICTORIAN QSL BUREAU

Cards for the undermentioned stations are on hand at the above bureau, 23 Landale street, Box Hill, and will be forwarded on receipt of stamped envelope:—BX, CB, CG, DY, EM, ER, ES, FC, FM, FY, FZ, GA, GU, GX, HT, JM, JO, JX, JW, JY, KA, LP, MH, MM, MQ, NC, NG, NK, NR, OF, OM, OP, OV, OY, OQ, OZ, RN, RQ, RT, RW, SB, SK, TP, UJ, VU, WB, WH, WK, XK, XQ, XX, YL, ZB, ZF, ZL, ZM, ZX.

The picturesque card mentioned in last month's "Amateur Radio" as being worthy of a place on any shack wall is that of VS3AE, not VS3AB, as was erroneously stated.

DX hounds should carefully note the alteration to the prefixes of the following countries:—

Country.	Old Prefix.	New Prefix.
Austria . . .	UO	OE
Hedjaz . . .	UH	HZ
Lithuania . .	RY	LY
Luxemburg . .	UL	LX
New Hebrides	YH	YJ
Panama . . .	RX	HP
Persia . . .	RV	EP or EQ
Roumania . . .	CV	YO to YR
Saar . . .	TS	EZ
U.S.S.R. . . .	AU & EU	U
Vatican . . .	—	HV
Yugoslavia . .	UN	YT or YU

Entry forms for the forthcoming BERU tests may be obtained at this bureau or from any of the BERU sub-reps.

Listeners sending out report cards would be well advised to adopt some distinctive call sign, as the customary "VK3" or "VK3QSL" are utilised by scores of listeners, and QSL managers are not blessed with sufficient second-sight to be able to determine the rightful owners of cards acknowledging the receipt of listeners' reports. Transmitters can assist QSL managers in this direction by quoting the listener's distinctive call-sign, or preferably the full address, when replying to listener reports.

Moroccan hams who heretofore have belonged to the Radio Emetteurs Francaise have severed their connection with this association and have formed a ham association of their own. They propose to affiliate with the I.A.R.U. The secretary of the association which is styled Réseau Emetteurs Maroc is CN8MD, and the address is CN8MD, M. G. Daussey, Ecole des Roches Noires-Casablanca, Morocco.

PK hams would be grateful if all VK stations working PK during the last six months would forward cards verifying the contact. The cards are necessary to enable the N.I.V.I.R.A. to determine the winner of its recent DX contest.

Writing to the manager of the VK3 QSL bureau conveying thanks for QSL services, Robert Guthrie, W9IH, mentions that numbers of the members of the Milwaukee Radio Club are on 28 MC at times, corresponding to 1800 GMT Saturday, to 0400 GMT Sunday, and are on the lookout for VK and other DX. They have been successful in hearing and contacting stations situate on both coasts of the U.S.A. and in Canada.

R. E. Jones, VK3RJ, QSL Manager.

R.A.A.F. Wireless Reserve Notes



VMC

Total No. of Messages **1427**

Average per Station **75**



VMC4

Total No. of Messages **811**

Average per Station **135**



3D6

Total No. of Messages **375**

Federal Notes by the C.O.

The principal feature of this month's notes is the announcement of the winner of the Ramsay Trophy for 1933. It gives me very great pleasure in awarding 3C6 this valuable trophy for not only participating in the contest, but for returning a practically flawless copy of the 400 odd word broadcast message. This is obviously the outcome of keen concentration and enthusiasm on 3C6's part to see that the cup would at least remain in VMC. He is to be congratulated on having attained the high standard of operating in R.A.A.F. procedure that he has in such a comparatively short time. A special meeting of the VMC members is being called in order that the presentation may be made in front of his fellow-reservists.

Of any contests that I have had the task of adjudicating this has certainly been the hardest. The standard of all entrants was so high that it was only after hours of close study of the returns that the winner was decided upon. The Reserve has something to be proud of. It would be hard to imagine any other organisation in the world that has operators of such a high standard. An honourable mention must be made of the efforts of 3Z4, 4Z1, 3B3, and 3Z2. They stand out as a class of their own. Nevertheless, when one considers that the average number of mistakes for all entrants was only five in the 400-word message, one will realise that the others put up a remarkably good show.

Next year the award will be slightly different. It will be made on the standard of a member throughout the twelve months. Many items are to be taken into consideration as well as a general broadcast. Full details of the award will be circularised to all reservists shortly.

The second feature of this issue is the commencement of the monthly traffic awards for Districts, Sections and Individuals. This has been fully explained before, but for those outside the Reserve who hold some interest in its activities the scheme is outlined below.

With the object in view of creating more and more interest in their work, the reservists are being awarded, monthly, an honorary award for their efforts in originating traffic.

As with any sport or hobby, plenty of practice is required in order to become proficient in the art. Consequently it was thought that to encourage members to put traffic into circulation, and thereby exercise their knowledge, an award of some kind would be given in return for their efforts. This obviously means that, as long as there is an ambition behind each member, his spirit and enthusiasm will never wane.

The awards are three. The first, the "Crown," is for the district that returns the highest originated traffic total for the month, on the basis of membership to total. That is, the total is divided by the number of active members, giving a message-per-head return. This is necessary

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when one has districts of a varying number of members, in order to put them on the same footing. The second award, being the "Plume," is given to the section that returns the greatest total. The "Star" is the award for the individual member who puts up the highest total of anyone in the Reserve for that month. Consequently the three are interlocking. Each member must pull his weight for the sake of his section and district, as well as for himself.

The scheme has started off extraordinarily well, as the first award shows. The members who helped to put up such a score for VMC for the first month are to be congratulated on their fine efforts. It must be borne in mind, however, that consistency is the thing to aim at, and not special super-efforts now and again. One can hardly call this a contest to see who can put up big scores, although it creates friendly rivalry between districts, sections and individuals. The call signs of the winners each month will be placed alongside the awards at the top of our first page. Traffic returns and personal notes are to be in the hands of the District Commanders by the 20th of each month. This is the monthly closing date, so bear it in mind.

DISTRICT NOTES.

Third District, by 3Z1, VK3UK.

It was with a feeling of regret that we heard that 3A1, 3A2 and 3A6 would be unable to continue as active members, at any rate for the time being. Although 3A1 was a new member, by the speed with which he picked up procedure, and his general operating, it would not have been long before he would have been one of our most efficient stations. All members join with me in extending to him our deepest sympathy in his recent sad bereavement, in the death of his brother. 3A2 and 3A6 have been associated with the Third District almost since its inception, and have always been right up with the leaders in any of our contests. It is enthusiasm and hard work such as theirs that has done more than anything else to put VMC on the firm footing it now is. Each of these stations is unable to carry on owing to various circumstances, but we sincerely hope that it will not be long before they are actively back on the job again.

On 21st January we changed over

to our new Section Commanders. This now gives the Number Three man in each section the opportunity to show his organising ability. The stations who have just finished their term of office had the task of organising their section traffic in preparation for the Federal Traffic Awards each month. As the results show, their efforts have been attended by wonderful success.

VMC's members always seem to be on the move somewhere, and this month, being holiday time, has seen more than the usual number away from home. 3C2 is often heard keeping schedules when at Berriwilllock or Birchip, and using the local ham's gear. 3C3 has been down in the city recuperating after his recent illness, and his "Suntan" and health now speak volumes for the effect of Melbourne's beaches. 3Z4 left for Tasmania early in the month, and will be staying there for some weeks. 3D4 is expected in the city towards the end of the month on his annual holiday. Over the Christmas vacation we had a short visit from 3B5, and during the same period 3Z1 spent his time at Palm Beach, N.S.W., golfing and surfing.

The main interest this month has centred around the inauguration of the monthly traffic contest for all districts. VMC closed down active schedules from 17th December to 7th January, so the totals for our district perhaps are not so large as they otherwise would have been. All stations have worked hard to make our totals difficult to beat, and we are now eagerly awaiting the results.

Fourth District, by 4Z1-VK4AW.

Conditions generally in VMD during the past month have been anything but reliable. Static has been very bad on 4155 kcs, so much that watches have been kept on 6555 kcs. Interference on the latter frequency from commercial and army stations has been troublesome, which stresses the point in favour of reliable frequency meters or crystal control for D/C's as markers.

4B1 has moved to a country area, and will be off for quite a while until a power supply is available. 4B4 is keeping watches fairly regularly with a portable outfit, being located at a power line construction camp! 4A1 has blown his power supply, but promises to be on by the end of February

and to take over the duty of Deputy D/C.

4A2 has moved over to an A.C. area and is coming in with a shade more strength. The traffic total award scheme is well under way here, and February should see some totals.

Fifth District.

Owing to the resignation of the VME D/C being recently accepted this district is at a standstill. However, it is hoped that the South Australians will not let the Reserve down by allowing their organisation to lie dormant.

Sixth District, by 6Z1-VK6MN.

The first step of real progress has been made by 6Z1 and 6Z2 getting on to 6555 kcs. Mid-week watches find these stations on that frequency, whilst the Sunday morning watch is being conducted on 7 MC band until the power permits are received, when all watches will be on Reserve frequencies. Much of the holidaying spirit still prevails in the metropolitan area, but a new enrollment is expected any day, namely, 6RA. He has a Trit-Tet crystal oscillator just completed, and is working well. 6Z2 has been short of operators, but the chief op never fails to maintain a Reserve watch or a BERU schedule. Country members have been quiet; 6FL has not been heard as yet from his new abode. 6FM is busy, but manages to get on. With 6WX and 6XL in his vicinity he would be doing VMF great service by enlisting them. 6BO, in the far North, has not been heard of this month, apparently owing to adverse conditions. 6RW is likely to be enrolled any minute now. He was in Perth over Christmas, and expressed a desire to join the throng. Amateurs in this State with transmitters on the air, and who are keen on traffic, and R.A.A.F., should get in touch with the District Commander, 6MN.

Seventh District, by 7Z1-VK7RC.

We have made a start with the traffic for the monthly awards in this magazine, and after a few short trials things seem to be running along very smoothly. Due to the fact that we tried to keep traffic going on the 3.5 MC. band, but failed to some extent because of static, our totals for this month may seem rather weird. As all our stations are low powered it

is difficult to break through the static, and we have therefore reserved Sunday mornings for the traffic work. The weekly broadcast is given on Tuesdays from 7Z1, and when conditions do not permit satisfactory reception those who have received it 100 per cent. relay it to the less fortunate stations. 7Z3 attends the weekly broadcasts given by 1A1, but finds fading very bad at times. It would be very handy if some of the other D/C's were to keep on watch longer than they do after the broadcast, and relay it to us when these conditions arise. 7Z3 is using an E.C. oscillator on 6555, and gets a pure signal that is indistinguishable from C.C. 7CD has a new push-pull T.P.T.G. for 7 MC work, but sticks to the Hartley for 3.5 MC Reserve work. The only trouble with the Hartley is that with the '45 overloaded there is an appreciable change in frequency as time progresses, and whilst 7Z1 is standing by for 7CD to write out messages the signal has changed 10 kcs (more or less) by the time he has thought them out! 7CP and 7LZ were late with their reports this month. 7LZ went camping at Xmas time and took a portable with him to keep Reserve watches. All members are looking forward to the R.A.A.F. aircraft that is expected here for the Pageant next February. 7Z1 has been presented a silver cup by his sister for a contest amongst the VMG boys, and wants to know what to do with it! Come on, VMG, and radio some suggestions tout suite.

Traffic totals for January:—7RC, 30; 7JW, 36; 7CP, 26; 7CD, 35; 7LZ, 11.

HARMONICS

VK3ES is a champion bagpipe player. The last time we saw him he was endeavouring to eliminate the audio feed-back in the chanter.

* * * *

The Editor's Christmas mailbag contained a card which read as follows:—

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INTERNATIONAL NEWS

The Polish amateurs staged an international competition under the auspices of their national society, P.Z.K. The rules provide for the winner being the Polish station securing the highest number of contacts with dx stations, and the successful exchange of a cipher group. Only one contact with each Polish station is allowed, and proof of contact is by qsl card, on which the correct cipher must be stated. The three foreign stations securing the highest number of points will be awarded special diplomas. Cards verifying test contacts, and quoting the cipher, should be sent to P.Z.K. or to this bureau. The test commenced at 00.01 G.M.T. on December 17th, and concluded at 24.00 G.M.T. December 30th.

VK3WL, who has been ill for some time, is now doing well, and we hope he will enjoy a speedy recovery to full health. His B.E.R.U. activities are temporarily in the hands of VK3RJ.

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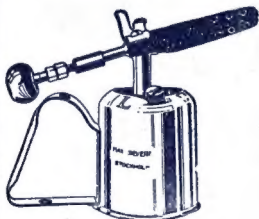


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